SECTION IV.—BIBLIOGRAPHY.

RECENT ADDITIONS TO THE WEATHER BUREAU LIBRARY.

C. FITZHUGH TALMAN, Professor in Charge of Library.

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies:

Albano, Ildefonso.

O secular problema do nordeste; 2a edição. Discurso pronunciado na Camara dos deputados em 15 de outubro de 1917 . . . Rio de Janeiro. 1918. 3 p. l., [5]-163 p. illus. plates. tables. 24 cm. [Discusses droughts in northeast Brazil.]

Chapman, Frank M[ichler].

The distribution of bird-life in Colombia; a contribution to a biological survey of South America. New York. 1917. x, 729 p. front. (fold. map.) plates. (part. col.) maps (part. fold.) 24½ cm. At head of title: Bulletin of the American museum of natural history. vol. 36, 1917. . . Bibliography, p. 657-659. [Climatology, p. 79-83.]

Collenette, A

The rainfall and sunshine of Guernsey for the year 1915. covertitle, 7 p. incl. tables. 22½ cm. (Reprinted from the Transactions of the "Guernsey society of natural science" for 1915.) The rainfall and sunshine of Guernsey for the year 1916. covertitle, 8 p. incl. tables. 224 cm. (Reprinted from the Transactions of the "Guernsey society of natural science" for 1916.) The rainfall of Guernsey for the year 1914. cover-title, 5 p. incl. 3 tables. 221 cm. (Reprinted from the Transactions of the "Guernsey society of natural science" for 1914.)

The sunshine of Guernsey for the year 1914. cover-title, 3 p. incl. table. 22½ cm. (Reprinted from the Transactions of the "Guernsey society of natural science" for 1914.)

Great Britain. Meteorological office.

Réseau mondial, 1913. Monthly and annual summaries of pressure, temperature, and precipitation at land stations, generally two for each ten-degree square of latitude and longitude . . . London. 1918. xv, 112 p. incl. tables. 31½ cm. At head of title: Meteorological office. British meteorological and magnetic year book, 1913. Part V. M. O. No. 214g. (Tables.)

Guernsey. Meteorological station.

Observations météorologiques, 1917. Rapport. Guernsey. 1918.
cover-title, 16 p. fold. chart. 8 tables. 27½ cm. In French and English. A. Collenette, Observer.

Johnstone, James.

The Gulf Stream and the weather. 25 cm. (Excerpted from the Journal of the Manchester geographical society. vol. 33, parts 1-4. 1917. p. 23-30.) [Describes gulf stream, and shows how cyclones may originate over "islands" of warm water.]

New York central railroad. Office of consulting engineer, rails, tires, and structural steel.

Chart of mild and cold winters. 6th Annual weather issue. New York. 1918. sheet. chart. table. 261 x 61 cm. At head of title: United States railroad administration . .

Sutton, J[ohn] R[ichard].

A lunar period in the rates of evaporation and rainfall. 7 tables. 251 cm. (Excerpted from Transactions of the Royal Society of South Africa, Cape Town. vol. 7, part 1. 1918. p. 103-109.)

Tippenhauer, L[ouis] G[entil].

The dependence of the mean monthly temperature on the earth The dependence of the mean monthly temperature on the earth from the variation of the electromagnetic energy of the sun. Port-au-Prince. 1918. p. 1., [29]-36 p. 28 tables. 2 fold. charts. 30 cm. At head of title: The electromagnetic theory of the weather. Fifth part. (English edition.)

La dépendance de la pluie de la double action du soleil et de la lune. Port-au-Prince. 1918. 9 fold. tables. 2 fold. charts. 26 cm. At head of title: La théorie électromagnétique du temps. Sixième partie. Communication provisoire.

Vaughan, Thomas Wayland.

The temperature of the Florida coral-reef tract. 3 maps. tables. 30 cm. (Excerpted from Carnegie institution of Washington. Dept. of marine biology. Papers. vol. 9. 1918. p. 319–339.) Carnegie institution publication no. 213.

Winchell, A[lexander] N[ewton].
The dustfall of March 9, 1918, by A. N. Winchell and E. R. Miller. cover-title. illus. map. chart. 231 cm. (Reprinted from the American journal of science. vol. 46. October, 1918. p. 599-609.) [Revised and extended in this issue of the Review, pp. 502-506.]

RECENT PAPERS BEARING ON METEOROLOGY AND SEISMOLOGY.

C. FITZHUGH TALMAN, Professor in Charge of Library.

The following titles have been selected from the contents of the periodicals and serials recently received in the Library of the Weather Bureau. The titles selected are of papers and other communications bearing on meteorology and cognate branches of science. This is not a complete index of all the journals from which it has been compiled It shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau.

Air. London. v. 2. April, 1918.

Horner, Donald W. Meteorology in relation to aviation. p. 47-50.

Arkiv för matematik, astronomi och fysik. Stockholm. Band 11. No. 18. 1916.

Akerblom, Filip. Ueber die Beziehungen zwischen Luftdrucks-gradient, Wind und Reibung bei stationärer, geradliniger

Bewegung. p. 1-19.

Arkiv för matematik, astronomi och fysik. Stockholm. Band 13. 1918.

Lundblad, Ragnar. A theory of the pyrgeometer of Angström. (No. 7.)

Ångström, Anders. Determination of the constants of pyrgeom-

eters, p. 10. (No. 8.)

Association of American geographers. Annals. New York. v. 7.

Henry, Alfred Judson. Memoir of Cleveland Abbe. p. 61-67.

Association of American geographers. Annals. New York. v. 8.

Ward, Robert DeC[ourcy]. Meteorology and war-flying, some practical suggestions. p. 3-33. [Except for the introduction, this is the same as the article in M. W. R., Dec., 1917, 45:591-600.1

British rainfall. London. v. 57. pt. 1. 1917.

The great rain storm of June 28th, 1917. p. 22-30. [Heaviest 24-hour rainfall ever recorded in British Isles.]

Nash. W. C. The diminution of rainfall with elevation. p. 34-39. [Compares records of several gages at Royal Observatory, Green-

wich, up to 50 feet.]

Engineering news-record. New York. v. 81. December 19, 1918.

Electric heaters keep track switches clear of snow and ice. p. 1120.

Great Britain. Meteorological office. Circular. London. no. 30. November 26, 1918.

Pilot balloon observations: the Shoeburyness system. p. 1-2.

National academy of sciences. Proceedings. Washington. v. 4. October. 1918.

Abbot, C[harles] G[reeley]. The Smithsonian solar constant expedition to Calama, Chile. p. 313-316. Scientific American. New York. v. 119. December 21, 1918.

Scientific American. New York. v. 119. December 21, 1918.

Carpenter, Ford Ashman. Ice formation over a stream. p. 501.

Scientific monthly. New York. v. 8. January, 1919.

Ward, Robert DeClourcy]. Weather controls over the fighting during the autumn of 1918. p. 5-15.

Tokyô mathematico-physical society. Proceedings. Tôkyô. v. 9. November 1918.

vember, 1918.

Fujiwhara, Sakuhei. On the theory of the Lowitz's arc and allied phenomena. p. 502-515.

Terada, Torahiko. On the frequency of earthquake and allied

phenomena. p. 515-522.

Académie des sciences. Comptes rendus. Paris. Tome 167. 25 novembre 1918.

Bourgeois. Sur une méthode de détermination de la vitesse et de la direction des vents, par temps couvert, à l'aide de sondages par le son. p. 769-772.